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United States Department of the Interior

Northeastern California and Northwestern Nevada

MEMORANDUM

To: The Secretary

Through: Sylvia V. Baca, Assistant Secretary, Land and Mineral Management

From: Director, Bureau of Land Management

Subject: Approval of Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing

STANDARDS

for Rangeland Health

and

GUIDELINES

for Livestock Grazing Management

Prepared by the Bureau of Land Management
California State Office
June 1999

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BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240
<http://www.blm.gov>In Reply Refer To:
4180 (220)

MEMORANDUM

To: The Secretary

Through: Sylvia V. Baca *Sylvia V. Baca* JUN 13 2000
Assistant Secretary, Land and Minerals Management

From: Director, Bureau of Land Management *W. H. H. H. H.*

Subject: Approval of Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing

In accordance with 43 CFR 4180.2(b), the Acting California State Director is submitting for Secretarial approval the attached Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing. BLM review finds that they comply with the requirements of the regulations. Standard and Guidelines development occurred in consultation with the Northeast California and Northwest Nevada Resource Advisory Council and with full public participation. BLM analyzed these standards and guidelines in an Environmental Impact Statement (EIS), which was protested. BLM appropriately considered and addressed the issues stated in the protests, and used them when it developed the Record of Decision (ROD) following the EIS. The ROD also incorporated the Standards and Guidelines into the appropriate land use plans.

I recommend that you approve the Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing.

I concur with (concur/not concur) with your recommendation and (approve/not approve) the Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing.

Approved: *Be B. H. H.*

Date:

JUL 13 2000

Attachment

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in NORTHEASTERN CALIFORNIA and NORTHWESTERN NEVADA

1. PREAMBLE

Healthy rangelands contribute to the social and economic well being of rural communities in Northeastern California and Northwestern Nevada, and they provide, over the long-term, the most reliable harvest of rangeland resources. The objective of rangeland resource planning is to integrate BLM resources with other resources to achieve the mandate of multiple-use and sustained yield management of renewable resources in an environmentally sound and cost-effective manner.

The standards of rangeland health are expressions of physical and biological condition or degree of function required for healthy sustainable rangelands. The Standards are applied on a landscape scale. Some standards may not apply to all acres. For example, a mosaic of vegetation types and age classes may produce the diversity associated with healthy rangelands; however, some individual vegetation communities within the mosaic may lack diversity.

The Standards always relate to the capability or potential of a specific site. The land will not be expected to produce vegetation or support habitats not attainable due to climate, soils, or other limiting attributes. The Standards are designed to establish the threshold for healthy rangelands. The Standards contain exceptions for certain necessary or unavoidable circumstances (see, for example, Standard 4); however, the exceptions should be applied under extreme conditions only, and must be fully justified.

The guidelines for grazing management are the types of grazing management methods and practices determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting the standard. The Guidelines were designed to provide direction, yet offer flexibility for implementation through activity plans and terms and conditions for grazing permits. The BLM must operate within the constraints of other regulatory requirements that may affect how S&G's are applied for livestock grazing, for example the Wild Free-Roaming Horse and Burro Act (1971).

2. STANDARDS for RANGELAND HEALTH

STANDARD 1: UPLAND SOILS

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, and landform, and exhibit functional biological, chemical, and physical characteristics.

Meaning that:

Precipitation is able to enter the soil surface and move through the soil profile at a rate appropriate to soil type, climate, and landform; the soil is adequately protected against human-caused wind or water erosion; and the soil fertility is maintained at, or improved to, the appropriate level.

STANDARD AND METHODS OF ANALYSIS FOR THE DETERMINATION OF THE CONTENT OF VITAMIN A IN FOODS

1. PRELIMINARY

The purpose of this preliminary section is to provide a general overview of the methods used in the determination of the content of Vitamin A in foods. It is intended to provide a general overview of the methods used in the determination of the content of Vitamin A in foods.

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Criteria to Meet Standard:

- * Groundcover (vegetation, litter, and other types of groundcover such as rock fragments) is sufficient to protect sites from accelerated erosion.
- * Evidence of wind and water erosion, such as rills and gullies, pedestaling, scour or sheet erosion, and deposition of dunes is either absent or, if present, does not exceed what is natural for the site.
- * Vegetation is vigorous, diverse in species composition and age class, and reflects the potential natural vegetation or desired plant community (DPC) for the site.

STANDARD 2: STREAMS

Stream channel form and function are characteristic for the soil type, climate, and landform.

Meaning that:

Channel gradient, pool frequency, width to depth ratio, roughness, sinuosity, and sediment transport are able to function naturally and are characteristic of the soil type, climate, and landform.

Criteria to Meet Standard:

- * Gravel bars and other coarse textured stream deposits are successfully colonized and stabilized by woody riparian species.
- * Stream bank vegetation is vigorous and diverse, mostly perennial, and holds and protects banks during high stream flow events.
- * The stream water surface has a high degree of shading, resulting in cooler water in summer and reduced icing in winter.
- * Portions of the primary floodplain are frequently flooded (inundated every 1-5 years).

STANDARD 3: WATER QUALITY

*Water will have characteristics suitable for existing or potential beneficial uses.
Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California and Nevada State standards, excepting approved variances.*

Management Objective: For water bodies, the primary objective is to maintain the existing quality and beneficial uses of water, protect them where they are threatened, and restore them where they are currently degraded. This objective is of even higher priority in the following situations:

STANDARD 1: WATER QUALITY

- The water quality standard is the minimum level of water quality that is required to protect the health of the people and the environment.
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STANDARD 2: WATER QUANTITY

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STANDARD 4: WATER QUALITY

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

- a. where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;
- b. where aquatic habitat is present, has been present, or is potentially present for Federal threatened or endangered, candidate, and other special status species dependent on water resources; and
- c. in designated water resource sensitive areas such as riparian and wetland areas.

Meaning That:

BLM will:

Maintain the physical, biological, and chemical integrity of waters flowing across or underlying the lands it administers.

Protect the integrity of these waters where it is currently threatened.

Insofar as is feasible, restore the integrity of these waters where it is currently impaired.

Not contribute to pollution and take action to remedy any pollution resulting from its actions that violates California and Nevada water quality standards, Tribal water quality standards, or other applicable water quality requirements (e.g., requirements adopted by SWRCB or RWQCB in California, or Environmental Protection Agency (EPA) pursuant to Section 303(d) of the Clean Water Act or the Coastal Zone Reauthorization Act). Where action related to grazing management is required, such action will be taken as soon as practicable but not later than the start of the next grazing year (in accordance with 43 CFR 4180.1).

Be consistent with the nondegradation policies as identified by the States.

Develop and execute a Management Agency Agreement with the States of California and Nevada for the efficient protection of water quality associated with the BLM's management.

Work with the States' water quality administrative agencies and the EPA to establish appropriate beneficial uses for public waters, establish appropriate numeric targets for 303(d)-listed water bodies, and implement the applicable requirements to ensure that water quality on public lands meets the objectives for the designated beneficial uses of the water.

Develop and implement Best Management Practices (BMP's) approved by the States to protect and restore the quality and beneficial uses of water, and monitor both implementation and effectiveness of the BMP's. These BMP's will be developed in full consultation, coordination, and cooperation with permittees and other interests.

State or Tribal approved variances or exceptions to water quality standards may be applicable within their Basin Plans for specific types of activities or actions. The BLM will follow State or Tribal administrative procedures associated with variances.

STANDARDS AND CRITERIA FOR THE EVALUATION OF THE QUALITY OF THE ENVIRONMENT

The purpose of this study is to develop a set of standards and criteria for the evaluation of the quality of the environment. The study is based on the following assumptions:

1. The environment is a complex system consisting of various components and their interactions. The quality of the environment is determined by the degree to which these components and their interactions are in a state of balance and harmony.

2. The quality of the environment is a relative concept, and it varies from place to place and from time to time.

3. The quality of the environment is a dynamic concept, and it changes over time.

4. The quality of the environment is a subjective concept, and it varies from person to person.

5. The quality of the environment is a multi-dimensional concept, and it includes various aspects such as physical, chemical, biological, and social.

6. The quality of the environment is a holistic concept, and it involves the integration of all the above aspects.

7. The quality of the environment is a goal-oriented concept, and it is based on the idea of achieving a state of balance and harmony.

8. The quality of the environment is a process-oriented concept, and it involves the continuous monitoring and evaluation of the environment. The study is based on the following assumptions:

9. The quality of the environment is a relative concept, and it varies from place to place and from time to time.

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

As Indicated By:

- * The following do not exceed the applicable requirements for physical, chemical, and biological constituents including but not limited to: temperature, nutrients, fecal coliform, turbidity, sediment, dissolved oxygen, and aquatic organisms and plants (e.g., indicator macroinvertebrates, fish, algae, and plants).
- * Achievement of the standards for riparian, wetlands, and water bodies.
- * Monitoring results or other data that show water quality is meeting the standard.

STANDARD 4: RIPARIAN and WETLAND SITES

Riparian and Wetland areas are in properly functioning condition and are meeting regional and local management objectives.

Meaning that:

The riparian and wetland vegetation is controlling erosion, stabilizing stream banks, shading water areas to reduce water temperature, filtering sediment, aiding in floodplain development, dissipating energy, delaying floodwater, and increasing recharge of ground water that is characteristic for these sites. Vegetation surrounding seeps and springs is controlling erosion and reflects the potential natural vegetation for the site.

Criteria to Meet Standard:

- * Riparian vegetation is vigorous and mostly perennial and diverse in species composition, age class, and life form sufficient to stabilize stream banks and shorelines.
- * Riparian vegetation and large woody debris are well anchored and capable of withstanding high stream flow events.
- * Negligible accelerated erosion as a result of human related activities is evident.
- * Age class and structure of woody riparian and wetland vegetation are appropriate for the site.

Exceptions and Exemptions to Standard 4 (where Standard 4 is not applicable)

- * Structural facilities constructed for livestock/wildlife water or other purposes are not natural wetland and/or riparian areas. Examples are: water troughs, stock ponds, flood control structures, tailings ponds, water gaps on fenced or otherwise restricted stream corridors, etc.

As follows:

The following are the physical properties for the various grades of gasoline, kerosene, diesel oil, and fuel oil, as determined by the American Petroleum Institute (API) and the United States Bureau of Standards.

1. Specific gravity at 60°F. (15.6°C.)

2. Viscosity at 100°F. (37.8°C.)

STANDARD SPECIFICATIONS FOR PETROLEUM PRODUCTS

The following are the standard specifications for the various grades of gasoline, kerosene, diesel oil, and fuel oil, as determined by the American Petroleum Institute (API) and the United States Bureau of Standards.

Minimum Requirements

The following are the minimum requirements for the various grades of gasoline, kerosene, diesel oil, and fuel oil, as determined by the American Petroleum Institute (API) and the United States Bureau of Standards.

Maximum Allowable Limits

The following are the maximum allowable limits for the various grades of gasoline, kerosene, diesel oil, and fuel oil, as determined by the American Petroleum Institute (API) and the United States Bureau of Standards.

3. Flash point at 95°F. (35°C.)

4. Smoke point at 100°F. (37.8°C.)

5. Sulfur content, by weight, not to exceed 0.5%

6. Water content, by volume, not to exceed 0.1%

7. Sediment and sludge, by volume, not to exceed 0.1% after 24 hours at 100°F. (37.8°C.)

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

STANDARD 5: BIODIVERSITY

Viable, healthy, productive, and diverse populations of native and desired plant and animal species, including special status species, are maintained.

Meaning that:

Native and other desirable plant and animal populations are diverse, vigorous, able to reproduce and support nutrient cycles and energy flows.

Criteria to Meet Standard:

- * Wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations.
- * A variety of age classes is present for most species.
- * Vigor is adequate to maintain desirable levels of plant and animal species to ensure reproduction and recruitment of plants and animals when favorable events occur.
- * Distribution of plant species and their habitats allow for reproduction and recovery from localized catastrophic events.
- * Natural disturbances such as fire are evident but not catastrophic.
- * Nonnative plant and animal species are present at acceptable levels.
- * Habitat areas are sufficient to support diverse, viable, and desired populations and are connected adequately with other similar habitat areas.
- * Adequate organic matter (litter and standing dead plant material) is present for site protection and decomposition to replenish soil nutrients and maintain soil health.

STANDARD AND CERTIFICATION

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3. GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT

The following guidelines are meant to apply to one or more of the standards for rangeland health.

Guideline 1: Adequate stubble will be present on all stream-side areas at the end of the growing season, or at the end of the grazing season if grazing occurs after fall dormancy. The residual or regrowth should provide sufficient herbaceous forage biomass to meet the requirement of plant vigor maintenance, bank protection, and sediment entrapment. Stubble height thresholds will be set on a site-specific basis, except for those allotments to which Guideline 16 applies (see Guideline 16 for an explanation of when Guideline 16 applies).

Utilization of stream-side herbaceous and woody plants should be limited to a specified amount of the current growth, and/or livestock should be removed to allow sufficient time for plant regrowth.

- a. Late season use (summer or fall grazed pastures) requires more restrictive utilization based on site specific situations.
- b. Special situations such as fragile fisheries habitats or easily eroded stream banks may require more restrictive utilization thresholds.
- c. Hoof action impacts or chiseling on stream banks will not exceed specified thresholds so that stream bank stability is maintained or improved.

Guideline 2: Desired seral states will be determined through the allotment management plan (AMP) development process; generally the goal will be to achieve advanced ecological status in the riparian zone, except where site-specific objectives call for lower ecological status (such as meadows in important sage grouse habitat, where the objective might call for a pattern of meadows in different seral stages from mid-seral to the potential natural community). These site-specific objectives will be determined through AMP's or other plans and analyzed through the NEPA process.

Guideline 3: Periods of rest from livestock grazing or other avoidable disturbances must be provided during/after periods of stress on the land (e.g., fire, flood, drought) and during critical times of plant growth.

Guideline 4: Plans for grazing on any allotment must consider other uses (recreation, archaeological sites, wildlife, horses and burros, mineral resource extraction, etc.) and be coordinated with the other users of public lands so that overall use does not detract from the goal of achieving rangeland health.

Guideline 5: Intensity, frequency, season-of-use, and distribution of grazing shall provide for growth and reproduction of desired plant species and the achievement of the potential natural vegetation or DPC.

Guideline 6: Grazing permits will include site-specific, measurable terms and conditions.

Guideline 7: Design and work towards implementation of a grazing management strategy for livestock for each grazing unit (pasture) within I (Improvement) and M (Maintenance) category allotments, to maintain or improve rangeland health. This may consist of, but not be limited to, season-of-use, rotation, or by setting utilization levels for desirable plants. Each management plan implemented will incorporate the factors necessary to maintain the health of desirable plants.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Guideline 8: Determination of grazing use by livestock must provide for the habitat requirements of fish and wildlife.

Guideline 9: Grazing management practices must sustain biological diversity across the landscape. A mosaic of seral stages, vegetation corridors, and minimal habitat fragmentation must be maintained.

Guideline 10: Take aggressive action to reduce the invasion of undesirable exotic plant species into native plant communities. The spread of noxious weeds will be controlled through appropriate methods such as grazing management, fire management, and other management practices.

Guideline 11: Prescribed fire and (natural) prescribed fire will be utilized to promote a mosaic of healthy plant communities and vegetative diversity.

Guideline 12: Grazing and other management practices shall take advantage of transitional opportunities (e.g., drought, flood, fire) to enhance or establish populations of desirable tree, shrub, herbaceous, and grass species. Utilization levels will be established for desired seedlings, saplings, and/or mature plants to promote their presence in the plant community.

Guideline 13: Development of springs, seeps, and other water related projects shall be designed to promote rangeland health. Wherever possible, water sources shall be available year long for use by wildlife.

Guideline 14: Apply the management practices recognized and approved by the States of California and Nevada as Best Management Practices (BMP's) for grazing related activities to protect and maintain water quality.

Guideline 15: In watersheds draining into water bodies that have been listed or are proposed for listing as having threatened or impaired beneficial uses, and where grazing activities may contribute to the pollutants causing such impairment, the management objective is to fully protect, enhance, and restore the beneficial uses of the water.

Guideline 16: Utilization Levels to be Applied to those Allotments Not Meeting or Making Significant Progress Toward Meeting the Standards

If monitoring or documented observation indicates that one of more of the standards is not being met, and if significant progress is not being made toward meeting all of those standards that are not being met, and if there is evidence that current grazing practices are causing or contributing to this unsatisfactory condition, then the following utilization levels will be applied.

1. The purpose of this study is to determine the effect of the independent variable on the dependent variable.

2. The study is a quantitative study and will use a survey method to collect data from a sample of the population.

3. The study is a descriptive study and will use a survey method to collect data from a sample of the population.

4. The study is a correlational study and will use a survey method to collect data from a sample of the population.

5. The study is an experimental study and will use an experimental design to collect data from a sample of the population.

6. The study is a quasi-experimental study and will use a quasi-experimental design to collect data from a sample of the population.

7. The study is a non-experimental study and will use a non-experimental design to collect data from a sample of the population.

8. The study is a mixed-methods study and will use a mixed-methods design to collect data from a sample of the population.

9. The study is a case study and will use a case study design to collect data from a sample of the population.

10. The study is a phenomenological study and will use a phenomenological design to collect data from a sample of the population.

11. The study is a grounded theory study and will use a grounded theory design to collect data from a sample of the population.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

Utilization of key upland herbaceous species

UTILIZATION GUIDELINES (adapted from Holechek 1988 and Holechek et al. 1998)	
Community Type	Percent of Use of Key Herbaceous Species
Salt desert shrubland	25-35
Semi-desert grass and shrubland	30-40
Sagebrush grassland	30-40
California annual grassland	50-60*
Perennial grass communities within the California annual grassland vegetation type	30-40
Coniferous forest	30-40
Mountain shrubland	30-40
Oak woodland	30-40
Pinyon-juniper woodland	30-40
Alpine tundra	20-30

* Residual dry matter (RDM) guidelines will be used instead of these utilization levels for management of annual species in the California annual grassland. These RDM levels correspond approximately with these utilization levels. The RDM levels given in the table in the Final EIS under Alternative 5, Ukiah RAC Recommended Standards and Guidelines (Section 2.92), will be used for those few annual allotments within the area covered by the Northeastern California and Northwestern Nevada Standards and Guidelines.

Utilization of key upland browse species

There will be no more than 20 percent utilization of annual growth on key browse species prior to October 1 within identified deer concentration areas. These concentration areas are those areas within mule deer habitat where mule deer numbers are most likely to be concentrated during the winter season (winter season normally occurs from December 16 through March 31). These areas have been identified through State Fish and Game Agency fall and spring counts over a period of several years. Maps of these deer concentration areas are on file at the BLM Eagle Lake Field Office.

Utilization of key riparian species

A 4-6 inch minimum stubble height will remain at the end of the growing season in most riparian areas.

There should be no more than 20 percent utilization on key riparian trees and shrub species in those areas where the presence of woody riparian species is necessary to meet standards.

Application of the above utilization levels

These utilization guidelines will be applied to those areas of the allotment responsible for the determination that the allotment is not meeting the standards. For example, an allotment has 10 riparian areas, of which six have been determined to be in proper functioning condition and four have been determined to be functional-at risk. The utilization guidelines for riparian species given above would be applied to the four riparian areas that are functional-at risk, not to the six that are in proper functioning condition (although *all* of the riparian areas will be managed to meet the standards). Also, only those guidelines that are applicable to making progress toward meeting the standards that are not being met would be applied. For example, if only riparian standards are not being met, then only the guidelines applicable to utilization and stubble height of riparian vegetation would be applied.

These utilization levels will be implemented unless and until a current site-specific analysis is completed and new utilization levels are developed for specific allotments and documented in AMP's, other management plans, and/or in terms and conditions of grazing permits/leases. New site-specific utilization levels that are developed may be more restrictive than the guidelines presented above, consistent with achieving the desired resource conditions (as prescribed in land use plans and activity plans) and progress toward meeting the standards.

Implementation of this guideline

1. Uplands (including perennial grass and browse communities).

Guideline 16 will be implemented only on those upland areas that are responsible for the determination that the allotment is not meeting one or more of the standards and for which lighter utilization would be expected to move these areas toward meeting the standard(s).

Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70 percent of upland key areas on the pasture (or allotment) are not to exceed maximum utilization guidelines in most years. Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70 percent utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

The management options to be implemented to meet this guideline will be determined in full consultation, cooperation, and coordination with affected permittees and other interests.

For allotments not meeting or making significant progress toward meeting the standards (and for which lower utilization levels of perennial upland species would be expected to help move these allotments toward the standards), utilization data already in hand will be used to determine whether a management

STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA

change is necessary. Thus, for example, if utilization on a particular key area has exceeded the thresholds for the 2 years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring utilization levels within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

2. Riparian areas (including herbaceous and woody plant communities).

Guideline 16 will be implemented only on those riparian areas that are nonfunctional or functional--at risk and lighter utilization levels would be expected to move these areas toward meeting the standards. The guideline will apply where the riparian area in a healthy state has the capability to produce vegetation of the prescribed height. The stubble heights will be measured at the end of the growing season to determine if the guideline has been met. Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if stubble heights on the average of the key riparian areas across the pasture (or allotment if there is only one pasture) fall below the guidelines for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70 percent of riparian key areas on the allotment are to exceed minimum stubble heights in most years. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents.

Because stream banks may be inadequately protected by heavy use in any one year and because stubble heights below 3 inches result in cattle shifting their preference to shrubs, stubble heights below 2 inches in any one year will require a management change in the following year.

The mean stubble height on key riparian species will be estimated at each riparian key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

For allotments not meeting or making significant progress toward meeting the standards (and for which higher stubble would be expected to help move these allotments toward the standards), stubble height data already in hand will be used to determine whether a management change is necessary. Thus, for example, if stubble heights on a particular key area have fallen below the thresholds for the 2 years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring stubble heights within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

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The management options to be implemented to meet this guideline will be determined in full consultation, coordination, and cooperation with affected permittees and other interests.

If reductions in permitted use are required

Any reductions in permitted use required as a result of implementing this guideline will be held in suspension and apportioned back to the permittee(s) or lessee(s) authorized to graze in the affected allotment if rangeland health improves to the extent that the authorized officer determines additional forage to be available.

Guideline 17: Rangeland monitoring to determine utilization of forage resources and trend of rangeland health will be conducted in each allotment based on current accepted practices and techniques as directed in the Interagency Technical References: *Utilization Studies and Residual Measurements* (BLM et al. 1996b) and *Sampling Vegetation Attributes* (BLM et al. 1996a). Monitoring methodologies will be applicable to local conditions and developed in consultation with permittees and interested publics.

To the extent possible, monitoring methods will be simple and easily accomplished. BLM, permittees, or others will do the monitoring. BLM will be responsible for ensuring that the monitoring is conducted in accordance with currently accepted practices and techniques, for analyzing and interpreting the data collected (in consultation, coordination, and cooperation with affected permittees and other interests), and for the accuracy of the data.

Existing key areas will be used where they exist. New key areas will be selected in full consultation, coordination, and cooperation with affected permittees and other interests. BLM will periodically review established key areas to determine if they continue to be appropriate to management. This review will be done in full consultation, coordination, and cooperation with affected permittees and other interests. If there is disagreement between BLM, permittees, and other interests over the location of key areas, the RAC will be asked for ideas on resolution. The final decision on the placement of key areas, however, rests with BLM.

BLM, in cooperation with other agencies, including Cooperative Extension, the Natural Resources Conservation Service, and the Forest Service, will provide training for permittees and other interested parties on rangeland monitoring methods.

The Committee on the Status of Women will be concerned in the course of its work with the general situation of women in the various countries, and with the progress of the work of the various commissions and committees.

II. THE COMMITTEE ON THE STATUS OF WOMEN

A very important part of the work of the Committee on the Status of Women will be to study the general situation of women in the various countries, and to make recommendations to the various commissions and committees on the basis of its studies. The Committee will also be concerned with the progress of the work of the various commissions and committees.

Guidelines for the work of the Committee on the Status of Women will be to study the general situation of women in the various countries, and to make recommendations to the various commissions and committees on the basis of its studies. The Committee will also be concerned with the progress of the work of the various commissions and committees.

To the extent possible, the Committee on the Status of Women will be concerned with the general situation of women in the various countries, and to make recommendations to the various commissions and committees on the basis of its studies. The Committee will also be concerned with the progress of the work of the various commissions and committees.

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It is the duty of the Committee on the Status of Women to study the general situation of women in the various countries, and to make recommendations to the various commissions and committees on the basis of its studies. The Committee will also be concerned with the progress of the work of the various commissions and committees.

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA**

IMPLEMENTATION

The fallback standards (43 CFR 4180.2(f)(1)) have been in effect since August 12, 1997. An initial screening of allotments was made, based on existing information, to determine the status of each allotment with respect to meeting the fallback standards. Each allotment was placed into one of four categories as follows:

- Category 1: Areas where one or more standards are not being met, or significant progress is not being made toward meeting the standards(s), and livestock grazing is a significant contributor to the problem.
- Category 2: Areas where all standards are being met, or significant progress is being made toward meeting the standard(s).
- Category 3: Areas where the status for one or more standards is not known, or the cause of the failure to not meet the standard(s) is not known.
- Category 4: Allotments where one or more of the standards are not being met or significant progress is not being made toward meeting the standards due to causes other than (or in addition to) livestock grazing activities. (Those allotments where current livestock grazing is also a cause for not meeting the standards are included in Category 1 in addition to this category.) The authorized officer should take appropriate action based on regulation or policy; however, these actions not related to livestock grazing are outside the scope of this implementation plan and will not be addressed in this document.

An assumption has been made by the BLM field managers that, with few possible exceptions, the implementation needed for the regulatory fallback standards and guidelines will essentially be the same as for any anticipated set of final approved standards and guidelines implemented pursuant to this Record of Decision (ROD). Consequently, the categorization of allotments under the standards in this ROD is likely to be the same as the categorization under the fallback standards and guidelines. Existing allotment assessments and their resulting determinations as to category will be reviewed to ensure that the determination is correct under the standards set in place by this ROD.

New allotment assessments, reviews of existing allotment assessments, and determination of allotment category will be conducted in full consultation, coordination, and cooperation with permittees and other interests.

We intend to conduct rangeland health assessments on all allotments within the next 5 years. First priority for these assessments will be given to those allotments where we already know or suspect one or more of the standards is not being met. These include those allotments placed in Category 1 under the fallback standards and those allotments currently in Category 3 that we have reason to believe may not be meeting standards. After these allotments have been assessed, the remaining allotments will be assessed using the BLM I, M, and C priority management system, with first priority to I, second to M, and last to C.

EXHIBIT 10

The purpose of this exhibit is to provide information regarding the various categories of information that are being provided to the public. The information is being provided in order to ensure that the public is aware of the various categories of information that are being provided to the public.

Category 1: Information that is being provided to the public in order to ensure that the public is aware of the various categories of information that are being provided to the public.

Category 2: Information that is being provided to the public in order to ensure that the public is aware of the various categories of information that are being provided to the public.

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Category 5: Information that is being provided to the public in order to ensure that the public is aware of the various categories of information that are being provided to the public.

Category 6: Information that is being provided to the public in order to ensure that the public is aware of the various categories of information that are being provided to the public.

Category 7: Information that is being provided to the public in order to ensure that the public is aware of the various categories of information that are being provided to the public.

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in NE CALIFORNIA and NW NEVADA**

For those allotments where the standards are not being met (Category 1), management actions will be implemented to correct the situation prior to the next grazing season turn-out period for the allotment. The management options will be determined in full coordination, consultation, and cooperation with permittees and other interests.

Monitoring will be conducted to evaluate the progress towards improving rangeland health and to evaluate the success of the specific management measures applied (see Guideline 17).

APPLICATION OF GUIDELINES

Once the guidelines are approved by the Secretary of the Interior, they will be applicable to the management of livestock grazing on all allotments not meeting the health standards. Some guidelines will be applicable regardless of the specific rangeland health condition, as they are designed to help protect and sustain rangeland health and are not intended to be applied only to remedy problems. Many of the guidelines will need to be more specifically identified and then applied as terms and conditions of a permit or lease, based upon the specific needs for meeting rangeland health standards. There will be instances where specific terms and conditions will be applied to grazing use authorizations for reasons other than those directly related to rangeland health, such as to accommodate other resource needs and land uses or to meet administrative requirements. Examples of this may include protecting cultural resource sites, requiring a specific breed of livestock to be used that is compatible with the needs of other permittees or lessees using the same allotment, or for meeting various regulatory requirements for grazing administration purposes. In some instances, existing terms and conditions will be carried over from previously made plans and commitments, such as those identified in allotment management plans or coordinated management plans. In these instances, the terms and conditions may or may not be related to rangeland health needs.

Any terms or conditions specified for a permit or lease must be consistent with and support appropriate BLM land use plans or other land use plans applicable to the public lands. BLM will also adhere to requirements such as those identified as terms or conditions from a biological opinion for protecting the habitat of a plant or animal under the Endangered Species Act.

Terms and conditions will be applied to grazing permits, leases, or other grazing authorizations as the authorized officer (Field Manager) determines the need. The determination of what terms and conditions will be applied will be made in full consultation, coordination, and cooperation with the respective permittees/lessees and other interested parties involved in the particular allotment. The same process will be used for making needed changes to any existing terms and conditions. Information from assessments and evaluations of monitoring data will be used to determine the management changes needed. Management options that would be expected to move allotments toward meeting the standards will be determined in full coordination, consultation, and cooperation with permittees/lessees and other interested parties.

Alternative management changes will be considered and evaluated through the NEPA process prior to making final determinations. It is anticipated that in most instances, the terms and conditions will be identified cooperatively and be agreed upon by the affected permittee/lessee and all interested parties. Where an agreement cannot be reached, then a formal decision (which is appealable) will be issued.

**IMPLEMENTATION of
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If reductions in permitted use are necessary to achieve the standards or meet the guidelines, the animal unit months (AUMs) by which the permitted use is reduced will be held in suspension. Once the authorized officer determines that rangeland health has recovered to an extent that all or part of the suspended permitted use can be restored, this suspended permitted use shall first be apportioned in satisfaction of suspended permitted use to the permittee(s) or lessee(s) authorized to graze in the allotment in which the forage is available (this is in accordance with 43 CFR 4110.3-1(b)).

REPORTING PROGRESS IN RANGELAND HEALTH ACHIEVEMENTS

Rangeland health conditions will be reported annually for each grazing allotment. This information will include the determinations of rangeland health conditions through assessments and monitoring and the progress made towards meeting rangeland health standards. At a minimum the report will identify, by allotment: (1) what standards, if any, are not being met; (2) whether significant progress is being made toward meeting those standards that are not currently being met; (3) the magnitude of those standards not being met, in terms such as acres, miles of stream, number of sites, etc.; (4) the progress that has been made in determining and implementing needed management changes; and (5) the results of making the management changes as determined from monitoring and assessment information. Additionally, any changes in the management categories of the allotments will be identified, accompanied by an explanation of the reasons for the change.

The above information will be gathered at the field office which administers the respective allotment(s). A summary of this information will be consolidated for all of the allotments within the EIS area and made available to the public annually.

Tables were provided in the Final EIS that showed all allotments in the State and the category to which they were assigned in 1997. Since that list was compiled, management changes have been implemented and additional assessment and monitoring work has been completed that makes those lists obsolete. When the annual report is compiled each year, an updated list of all allotments, by category, will be provided as part of the report.

Throughout all processes the public is encouraged to participate in the identification of rangeland health conditions, developing management remedies, monitoring results, and reviewing progress towards achieving rangeland health standards.

STUDY AND DEVELOPMENT OF RACIAL AND ETHNIC HEALTH CARE SERVICES

It is recognized that the use of the term "minority" is not always appropriate. The term "minority" is used in this report to refer to the racial and ethnic groups that are the focus of the study. The term "minority" is used in this report to refer to the racial and ethnic groups that are the focus of the study. The term "minority" is used in this report to refer to the racial and ethnic groups that are the focus of the study.

THE STUDY AND DEVELOPMENT OF RACIAL AND ETHNIC HEALTH CARE SERVICES

The study and development of racial and ethnic health care services is a complex task. It requires a deep understanding of the cultural, social, and economic factors that influence the health of these populations. The study and development of racial and ethnic health care services is a complex task. It requires a deep understanding of the cultural, social, and economic factors that influence the health of these populations. The study and development of racial and ethnic health care services is a complex task. It requires a deep understanding of the cultural, social, and economic factors that influence the health of these populations.

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